



Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-0291-16-F (R2)

Plant ID: 0291

Effective Date: 05/22/2016

Expiration Date: 05/22/2021

Revision Date: 11/4/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source: AarhusKarlshamn (AAK) K1
2520 South 7th Street
Louisville, KY 40208

Owner: AarhusKarlshamn (AAK) K1
2520 South 7th Street
Louisville, KY 40208

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve months and no later than ninety days prior to the expiration date.


Emission limitations to qualify for non-major status:

Pollutant:	CO	Single HAP	Total HAP	NO _x
Tons/year:	25	5	12.5	25

Application No.: See **Application and Related Documents** table.

Public Notice Date: 04/06/2018
09/29/2020

Permit writer: Aaron DeWitt

DocuSigned by:

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Air Pollution Control Officer
11/4/2020

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Permit Revisions and Changes

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
O-0124-01-F	06/03/2001	11/05/2001	Initial	Initial Permit Issuance
O-0291-16-F	04/14/2016	05/18/2016	Renewal	Permit Renewal
O-0291-16-F (R1)	04/06/2018	05/22/2018	Signif.	Significant Revision to incorporate Construction Permit C-0291-1000 into the FEDOOP permit.
O-0291-16-F (R2)	09/29/2020	11/4/2020	Admin	Admin revision to correct fuel types for the Babcox and Wilcox Steam Boiler (E121).

Construction Permit Summary

Permit No.	Issue Date	Description
C-0291-1000-18-F	03/16/2018	One (1) new Deodorizing unit, rated capacity 400 tons/day. The new unit replaces one of the existing units (276 tons/day each).
C-0291-0011-20-F	07/30/2020	Upgrade Babcox and Wilcox Steam Boiler (E121), capacity 43 MMBtu/hr with ability to burn both natural gas and No. 2 fuel oil as backup.

Application and Related Documents

Document Number	Date	Description
141537	05/21/2020	FEDOOP application modification 100A, B, C, D, E, H, & J
161088	07/27/2020	Construction permit C-0291-0011-20-F sent to company for review. Questioned need for construction and construction fee
161089	07/29/2020	District response to 7/27 email. No construction fee required
161091	07/29/2020	Company agrees to C-0291-0011-20-F without changes
161244	07/30/2020	Final construction permit C-0291-0011-20-F sent to company
172635	9/18/2020	Draft operating permit to company for review

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors</i> , published by U.S.EPA
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
(M)SDS	- (Material) Safety Data Sheet
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

- G1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
- G2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
- G3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
- G4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
- G5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
- G6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.
- G7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.
- G8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit.

The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.

- G9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 5 tons per year, or such lesser quantity as the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 12.5 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.
- G10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 25 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; or any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA. Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
- G11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
- G12. Unless specified elsewhere in this permit, the owner or operator shall submit semi-annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All compliance reports shall include the following per Regulation 2.17, section 3.5.
- A certification statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete", and
 - The signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 - June 30	August 29
July 1 - December 31	March 1 of the following year

- G13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards

Regulation	Title
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
1.18	Rule Effectiveness
1.19	Administrative Hearings
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.06	Permit Requirements – Other Sources
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
3.01	Ambient Air Quality Standards
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.04	Particulate and Sulfur Dioxide Reduction Requirements
4.05	Hydrocarbon and Nitrogen Oxides Reduction Requirements
4.06	Carbon Monoxide Reduction Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

- G14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
2.17	Federally Enforceable District Origin Operating Permits
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.15	Chemical Accident Prevention Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

- G15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.
- G16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.
- G17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

***Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137***

Plantwide Requirements

Facility Description

AAK is a vegetable oil processing facility. This facility bleaches, hydrogenates, deodorizes, and refines soybean oil.

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2

Plantwide Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. CO

The owner or operator shall not allow or cause the plantwide CO emissions to exceed 25 tons during any consecutive 12-month period.¹
[Regulation 5.00, section 1.13.5.1]

b. HAP

- i. The owner or operator shall not allow or cause the plantwide emissions of single HAP (Hexane) to equal or exceed 5 tons during any consecutive 12-month period.¹ [Regulation 2.17, section 5.1]
[Regulation 5.00, section 1.13.5.2]
- ii. The owner or operator shall not allow or cause the plantwide total HAP emissions to equal or exceed 12.5 tons during any consecutive 12-month period.¹ [Regulation 5.00, section 1.13.5.3]

c. NOx

The owner or operator shall not allow or cause the plantwide NOX emissions to exceed 25 tons during any consecutive 12-month period.¹
[Regulation 5.00, section 1.13.5.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. CO

The owner or operator shall monthly calculate and record the monthly and consecutive 12-month plantwide CO emissions.

b. HAP

- i. The owner or operator shall monthly calculate and record the monthly and consecutive 12-month plantwide single HAP emissions.

¹ On 3/11/2015, the source requested the limits of the criteria pollutants <25 tpy, total HAPs <12.5 tpy, and largest single HAP <5 tpy to qualify as a FEDOOP STAR Exempt as defined by Regulation 5.00, section 1.13.5. This will ensure the emissions are limited to below the major source thresholds of 100 tpy for criteria pollutants, 10 tpy of single HAP and 25 tpy of total HAP.

- ii. The owner or operator shall monthly calculate and record the monthly and consecutive 12-month plantwide total HAP emissions.

c. NO_x

The owner or operator shall monthly calculate and record the monthly and consecutive 12-month plantwide NO_x emissions.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. CO

The owner or operator shall report the monthly and consecutive 12-month plantwide CO emissions for each month in the report period.

b. HAP

- i. The owner or operator shall report the monthly and consecutive 12-month plantwide single HAP emissions for each month in the report period.
- ii. The owner or operator shall report the monthly and consecutive 12-month plantwide total HAP emissions for each month in the report period.

c. NO_x

The owner or operator shall report the monthly and consecutive 12-month plantwide NO_x emissions for each month in the report period.

Emission Unit U1: Bleaching, Hydrogenation, Deodorizing, and Refining Processes

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS²		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1, 2, 3, and 7
7.25	Standard of Performance for New Sources Volatile Organic Compounds	All

Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
Bleaching Process					
E1	Five (5) pressure leaf filter presses	1988	7.25	NA	F1
E4	Two (2) condensate receiver tanks, 1000 gallons each	1988	7.25	NA	F4
E5	Earth Slurry/Pre-coat tank, 6,000 lbs	1988	7.25	NA	F5
E6	Mixer tank, 100 gallons	1988	7.25	NA	F6
E7	N. Oil bleacher tank 103,350 lbs	1988	7.25	NA	F7
E8	S. Oil bleacher tank 103,550 lbs	1988	7.25	NA	F8
E9	#36 Surge tank 129,200 lbs	1988	7.25	NA	F9
E10	Steam out tank 25,000 lbs	1988	7.25	NA	F10
E11	Unused tank 1,400 gallons	1988	7.25	NA	F11
E12	Unused tank 275 gallons	1988	7.25	NA	F12
E13	#B7 Bleached oil storage tank 343,000 lbs	1988	7.12	NA	F13
E14	#B9 Bleached oil blend tank 342,000 lbs	1988	7.25	NA	F14
E15	#B11 Bleached oil tank 2,300,000 lbs	1988	7.25	NA	F15
E16	#B12 Bleached oil tank 305,600 lbs	1988	7.25	NA	F16

² 40 CFR 60 Subpart does not apply to the storage tanks in this emission unit because the vapor pressure of the oil is less than 15.0 kPa per 40 CFR 60.110(b).

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E17	#B13 Bleached oil tank 398,160 lbs	1988	7.25	NA	F17
E18	#B14 Bleached oil tank 398,160 lbs	1988	7.25	NA	F18
E19	E. BW Bleached oil tank 374,000 lbs	1988	7.25	NA	F19
E20	W. BW Bleached oil tank 374,000 lbs	1988	7.25	NA	F20
Hydrogenation Process					
E21	Two (2) filter presses	1988	7.25	NA	F21
E23	Four (4) hydrogen converters	1988	7.25	NA	F23
E24	#F1 Bleach tank 100,000 lbs	1988	7.25	NA	F24
E25	#F2 Bleach tank 105,000 lbs	1988	7.25	NA	F25
E26	#F3 Bleach tank 50,000 lbs	1988	7.25	NA	F26
E27	#1 Oil tank 425,000 lbs	1988	7.25	NA	F27
E28	#2 Oil tank 429,000 lbs	1988	7.25	NA	F28
E29	#3 Oil tank 334,000 lbs	1988	7.25	NA	F29
E30	#4 Oil tank 338,000 lbs	1988	7.25	NA	F30
E31	#5 Oil tank 342,000 lbs	1988	7.25	NA	F31
E32	#6 Oil tank 342,000 lbs	1988	7.25	NA	F32
E33	#8 Storage tank 342,000 lbs	1988	7.12	NA	F33
E34	#40 Blend tank 84,500 lbs	1988	7.25	NA	F34
E35	#41 Blend tank 104,520 lbs	1988	7.25	NA	F35
E36	#42 Blend tank 84,500 lbs	1988	7.25	NA	F36
E37	#43 Oil tank 137,125 lbs	1988	7.25	NA	F37
E38	#44 Oil tank 156,400 lbs	1988	7.25	NA	F38
E39	#45 Oil tank 156,400 lbs	1988	7.25	NA	F39
E40	#46 Oil tank 156,400 lbs	1988	7.25	NA	F40
E41	#47 Oil tank 156,400 lbs	1988	7.25	NA	F41
E42	#48 Oil tank 289,320 lbs	1988	7.25	NA	F42
E43	#49 Oil tank 289,320 lbs	1988	7.25	NA	F43
E44	#50 Oil tank 253,680 lbs	1988	7.25	NA	F44
E45	#129 Dump tank 68,500 lbs	1988	7.25	NA	F45
E46	#B 15 Blend tank 110,140 lbs	1988	7.25	NA	F46
E47	Slurry tank 5,000 lbs	1988	7.25	NA	F47

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E48	Condensate tank 9,000 lbs	1988	7.25	NA	F48
Deodorizing Process					
E49	One (1) Deodorizing system	1988	7.25	NA	F49
E50	Bayonne Unit	1988	7.25	NA	F50
E52	#21 Inside Storage Room Tank 64,500 lbs	1988	7.12	NA	F52
E53	#22 Inside Storage Room tank 64,500 lbs	1988	7.12	NA	F53
E54	#23 Inside Storage Room tank 64,300 lbs	1988	7.12	NA	F54
E55	#24 Inside Storage Room tank 64,000 lbs	1988	7.12	NA	F55
E56	#25 Inside Storage Room tank 64,500 lbs	1988	7.12	NA	F56
E57	#26 Inside Storage Room tank 65,000 lbs	1988	7.12	NA	F57
E58	#27 Inside Storage Room tank 64,700 lbs	1988	7.12	NA	F58
E59	#28 Inside Storage Room tank 115,000 lbs	1988	7.12	NA	F59
E60	#70 Distillate tank 67,780 lbs	1988	7.12	NA	F60
E61	#71 Shell drain tank 30,744 lbs	1988	7.25	NA	F61
E62	#114 Outside Storage Area tank 204,950 lbs	1988	7.12	NA	F62
E63	#115 Outside Storage Area tank 204,950 lbs	1988	7.12	NA	F63
E64	#116 Outside Storage Area tank 204,950 lbs	1988	7.12	NA	F64
E65	#117 Outside Storage Area tank 153,700 lbs	1988	7.12	NA	F65
E66	#118 Outside Storage Area tank 86,300 lbs	1988	7.12	NA	F66
E67	#119 Outside Storage Area tank 86,300 lbs	1988	7.12	NA	F67
E68	#120 Outside Storage Area tank 86,300 lbs	1988	7.12	NA	F68
E69	#121 Outside Storage Area tank 68,500 lbs	1988	7.12	NA	F69

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E70	#122 Outside Storage Area tank 43,354 lbs	1988	7.12	NA	F70
E71	#123 Outside Storage Area tank 43,354 lbs	1988	7.12	NA	F71
E72	#124 Outside Storage Area tank 98,002 lbs	1988	7.12	NA	F72
E73	#126 Fat Removal Storage 94,005 lbs	1988	7.25	NA	F73
E74	#161 Fat Removal Storage 95,009 lbs	1988	7.25	NA	F74
E75	#201 Outside Storage Area tank 841,680 lbs	1988	7.12	NA	F75
E76	#217 Outside Storage Area tank 109,000 lbs	1988	7.12	NA	F76
E77	#218 Outside Storage Area tank 109,000 lbs	1988	7.12	NA	F77
E78	#219 Inside Storage Area tank 81,980 lbs	1988	7.12	NA	F78
E79	#220 Inside Storage Area tank 81,980 lbs	1988	7.12	NA	F79
E80	#221 Outside Storage Area tank 99,000 lbs	1988	7.12	NA	F80
E81	#404 Deodorizer Oil Storage 100,000 lbs	1988	7.12	NA	F81
E82	#405 Deodorizer Oil Storage 45,000 lbs	1988	7.12	NA	F82
E83	#406 Deodorizer Oil Storage 45,000 lbs	1988	7.12	NA	F83
E84	K1 Bayonne Unit	1988	7.25	NA	F84
E85	K2 Bayonne Unit	1988	7.25	NA	F85
E86	K3 Bayonne Unit	1988	7.25	NA	F86
E87	D/A Bayonne Unit	1988	7.25	NA	F87
E88	K1 Bayonne Unit	1988	7.25	NA	F88
E89	One (1) Caustic Mix Tank	1988	7.25	NA	F89
E102	#145 Crude oil storage tank 2,300,000 lbs (E102)	1988	7.12	NA	F102
E103	#146 Crude oil storage tank 1,185,600 lbs (E103)	1988	7.12	NA	F103

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E104	#147 Crude oil storage tank 3,765,000 lbs (E104)	1988	7.12	NA	F104
E105	#148 Crude oil storage tank 2,300,000 lbs (E105)	1988	7.12	NA	F105
E107	#30 Refining soap stock hold tank 63,800 lbs (E107)	1988	7.12	NA	F107
E111	#34 Refining bleach (process) tank 63,800 lbs	1988	7.25	NA	F111
E123	Two (2) Feed Tanks, make Alfa Laval, rated capacity 24000 lb/hr each.	2018	7.25	NA	F123
E124	One (1) Deo Off-Spec Tank (Feed Tank), make Alfa Laval, rated capacity 24000 lb/hr.	2018	7.25	NA	F124
E125	One (1) Deodorizer, make Alfa Laval, rated capacity 400 ton/day and three (3) vacuum pumps, make Alfa Laval, rated capacity 122.7 GPM each.	2018	7.25	C1 and C2 (in series)	S1
Refining Process					
E91	Six (6) oil mixers	1988	7.25	NA	F91
E92	Six (6) SRG-214 refining centrifuges	1988	7.25	NA	F92
E93	Two (2) water wash POD horizontal centrifuges	1988	7.25	NA	F93
E95	Heaters	1988	7.25	NA	F95
E96	Coolers	1988	7.25	NA	F96
E97	One (1) condensate tank	1988	7.25	NA	F97
E98	One (1) vacuum dryer	1986	7.25	U2 E121 or U2 E122	S3 or S4
E99	Vacuum Pump	1988	7.25		
E100	One (1) hot well tank	1988	7.25		
E101	One (1) split box	1988	7.25	NA	F101
E106	#29 Refining Wash Water Tank 40,000 lbs	1988	7.25	NA	F106
E108	#31 Refining surge tank 63,800 lbs	1988	7.25	NA	F108
E109	#32 Refining holding tank 64,300 lbs	1988	7.25	NA	F109
E110	#33 Refining holding tank 63,800 lbs	1988	7.25	NA	F110
E112	#35 Refining Tank, not in use	1988	7.25	NA	F112

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E116	Two (2) Rail car wash tanks, 2,000 gallons each	1988	7.25	NA	F116
E118	Acidulation Tank	1988	7.25	NA	F118

Control Devices

Control ID	Description	Control Efficiency
C1	One (1) Scrubber, make Alfa Laval, rated capacity 93 GPM, installed 2018, to control odors	0% for VOCs ³
C2	Two (2) Parallel Ice Condensers, make Alfa Laval, rated capacity 568 lb/hr each, installed 2018	0% for VOCs ³
U2 E121	One (1) Babcox and Wilcox Steam Boiler, type: watertube boiler with low NO _x burner, installed originally in 1996, replaced in 2000 using same burner, updated 2020 to burn No. 2 Fuel Oil as backup, capacity 43 MMBtu/hr. Fuels: natural gas with No. 2 fuel oil backup	98% VOC
U2 E122	One (1) Nebraska Steam Boiler, type: watertube boiler, capacity: 60 MMBtu/hr. Fuels: natural gas with No. 2 fuel oil backup	98% VOC

Equipment Not Regulated

Emission Point	Description	Emission Point	Description
E2, E22, and E94	Heat Exchangers	E113	#C1 Refining caustic storage 105,000 lbs
E3	Vacuum Pumps	E114	#C2 Refining caustic storage 105,000 lbs
E51	One (1) water cooler located on roof	E115	#C3 Refining caustic storage 105,000 lbs
E90	Caustic Injection Equipment	E117	Three (3) water storage tanks

³ The control device is used to control free fatty acids/odors. The control device is not used to control hexane. There is no information provided for hexane emission control efficiency. AP-42, Chapter 9.11.1 Vegetable Oil Processing, suggests to assume that all hexane solvent is released to the atmosphere for emission calculations.

U1 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide Specific Condition.

b. VOC

- i. The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s) E13, E33, E52 through E60, E62 through E72, E75 through E83, and E102 through E107.⁴ [Regulation 7.12, section 3.3]
- ii. The owner or operator shall not allow or cause the plantwide VOC emissions from all affected facilities (all emission points in U1 subject to Regulation 7.25 and IA TK-100) subject to Regulation 7.25 to equal or exceed 5 tons during any consecutive 12-month period, unless a BACT is submitted and approved by the District.⁵ [Regulation 7.25, sections 2.1 and 3.1]
- iii. For Refining process, any gaseous or vapor emissions containing volatile organic compounds from the vacuum dryer (E98), vacuum pump (E99), and hot well tank (E100) of this emission unit shall be controlled by either the Babcox and Wilcox Steam Boiler (E121) or Nebraska Steam Boiler (E122). [Regulation 7.25, sections 2.1 and 3.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

See Plantwide Specific Condition.

b. VOC

- i. The owner or operator of the storage vessel(s) E13, E33, E52 through E60, E62 through E72, E75 through E83, and E102 through E107 shall maintain records of the material stored and the vapor pressure in each storage vessel

⁴ The vapor pressure of the vegetable/soybean oil stored in the tanks is less than 1.5 psia.

⁵ The source can use HAP (hexane) emissions as a surrogate for total VOC emissions since all VOC emissions from the source are Hexane.

and if the contents of the storage vessel(s) are changed a record shall be made of the new contents, the date of the change, and the new vapor pressure.

- ii. The owner or operator shall maintain records of the type and amount (throughput) of every VOC material used at this source.
- iii. The owner or operator shall maintain laboratory analysis records of Hexane content (ppm)/VOC in the incoming crude oil per batch and processed oil (before and after processing) quarterly for all the processes including: Refinery, Bleaching, Hydrogenation, and Deodorization processes.
- iv. The owner or operator shall monthly calculate and maintain records of the total VOC emissions subject to Regulation 7.25 for each consecutive 12-month period. The following equation shall be used to calculate Hexane/VOC emissions unless another method is approved in writing by the District:

Plantwide Hexane/VOC emissions (ton) = Hexane/VOC emissions (ton) from Refinery process x (1-0.98) + Hexane/VOC emissions (ton) from Bleaching process + Hexane/VOC emissions (ton) from Hydrogenation process + Hexane/VOC emissions (ton) from Deodorization process + VOC from IA TK-W100.⁶

Where;

Hexane/VOC emissions (ton) from each process = Oil processed (ton) x (ppm of Hexane before processing – ppm of Hexane after processing) /1,000,000⁷

- v. For Refining process, E98 and E100, any period of time when the process was operating and control device E121 or E122 was not operating, the owner or operator shall maintain the following records:
 - (1) The duration of the control device downtime;
 - (2) The process throughput during the control device downtime;
 - (3) The VOC emissions (tons); and
 - (4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.

⁶ For refinery process, VOC emissions from the process are vented to boilers (E121 or E122). A control efficiency of 98% shall be used for the emission calculation.

⁷ The oils are not extracted at the facility. The soybean and cottonseed oils are the only oils that are extracted by solvent. All other oils are mechanically extracted.

S4. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

See Plantwide Specific Condition.

b. VOC

- i. The owner or operator shall report the total plantwide consecutive 12-month VOC emissions subject to Regulation 7.25 for each month in the reporting period.
- ii. For Refining process, E98 and E100, identification of all periods when a process was operating and an associated control device was not operating, including the following information, or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
 - (1) The duration of the control device downtime;
 - (2) The process throughput during the control device downtime;
 - (3) The VOC emissions (tons); and
 - (4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.

Emission Unit U2: Indirect Heat Exchangers**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
7.06	Standards of Performance for New Indirect Heat Exchanges	1, 2, 3, 4, and 5
40 CFR 60 Subpart Dc	Federal New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units	60.43c(c) and 60.48c(d)

Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E119	One (1) Dowtherm/oil heater, capacity: 3 MMBtu/hr. Fuel: natural gas	1988	7.06	NA	S1
E120	One (1) Dowtherm/oil heater, capacity: 4 MMBtu/hr. Fuel: natural gas	1988	7.06	NA	S2
E121	One (1) Babcox and Wilcox Steam Boiler, type: watertube boiler with low NOx burner, installed originally in 1996, replaced in 2000 using same burner, capacity 43 MMBtu/hr. Fuels: natural gas with No. 2 fuel oil backup ⁸	1994	7.06, and 40 CFR 60 Subpart Dc	NA	S3
E122	One (1) Nebraska Steam Boiler, type: watertube boiler, capacity: 60 MMBtu/hr. Fuels: natural gas with No. 2 fuel oil backup	1990	7.06, and 40 CFR 60 Subpart Dc	NA	S4
E126	One (1) HP natural gas boiler, make Alfa Laval, rated capacity 900 kW (3.07 MMBtu/hr), installed 2018 (I.A.)	2018	7.06	NA	S2

Control Devices

There are no control devices associated with this equipment.

⁸ Updated boiler description in 2020 to include that No. 2 fuel oil can be used as a backup fuel. No physical modification was needed, only administrative change.

U2 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. CO

See Plantwide Specific Condition.

b. HAP

i. See Plantwide Specific Condition.⁹

ii. For E121 & E122, the owner or operator shall combust liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid.¹⁰ [40 CFR 63.11237]

iii. For E121 & E122, the owner or operator shall not exceed a combined total of more than forty-eight (48) hours of operation during a calendar year of liquid fuel testing.⁹ [40 CFR 63.11237]

c. NOx

See Plantwide Specific Condition.

d. Opacity

i. The owner or operator shall not cause to be discharged into the atmosphere from any affected facility particulate matter emissions which exhibit greater than 20% opacity except:¹¹ [Regulation 7.06, section 4.2]

(1) A maximum of 40% opacity shall be permissible for not more than two consecutive minutes in any 60 consecutive minutes;

ii. For E121 & E122, no owner or operator of an affected facility that can combust coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20% opacity (6-

⁹ HAP emissions from natural gas combustion should be included in the plantwide calculation for Single HAPs (Hexane) and Total HAP.

¹⁰ 40 CFR 63 Subpart JJJJJ, National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources emission standards are not applicable by definition to gas fired boilers. §63.11195 lists boilers not subject to the subpart and §63.11195(e) states “A gas fired boiler as defined in this subpart.” §63.11237 defines a gas fired boiler as “Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.”

¹¹ A determination has been made that a natural gas-fired boiler should inherently meet the opacity standard.

minute average), except for one 6-minute period per hour of not more than 27% opacity.¹² [40 CFR 60.43c(c)]

- iii. The opacity standards apply at all times, except during periods of startup, shutdown, or malfunction. [40 CFR 60.43c(d)]

e. PM

The owner or operator shall comply with the following PM emission standards:¹³ [Regulation 7.06, section 4.1]

Emission Point	Equipment	Emission Standard (lb/MMBtu)
E119	Dowtherm Boiler, capacity 3 MMBtu/hr	0.560
E120	Downtherm Boiler, capacity 4 MMBtu/hr	0.560
E121	Babcox and Wilcox Steam Boiler, capacity 43 MMBtu/hr	0.153
E122	Nebraska Steam Boiler, capacity 60 MMBtu/hr	0.202
E126	HP Natural Gas Boiler, 3.07 MMBtu/hr	0.153

f. SO₂

- i. The owner or operator shall not allow or cause to be discharged into the atmosphere any gases which contain SO₂ in excess of 1.0 pound per million BTU actual total heat input for combustion of liquid and gaseous fuels.¹⁴ [Regulation 7.06, section 5.1.1]
- ii. For E121 & E122, the owner or operator shall not combust fuel oil that contains greater than 0.5 weight percent sulfur. [40 CFR 60.42c(d)]
- iii. The fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(i)]

¹² 40 CFR 60.45c(a) requires the source subject to the PM and/or opacity standards under §60.43c to conduct an initial performance test as required under §60.8, to determine the compliance with the standard. The source conducted the test according with 40 CFR 60 Reference Method 9 on 11/03/1994 for E122 and demonstrated compliance with opacity standard specified in 40 CFR 60.43c(c).

¹³ A one-time PM compliance demonstration was performed for the boilers (five boilers, E119, E120, E121, E122, and E126, combined heat input is 113.07 MMBtu/hr) using AP-42 emission factors showing that the limits cannot be exceeded using natural gas. Therefore, there are no monitoring, recordkeeping or reporting requirements for the boiler with respect to PM lb/MMBtu emission limits.

¹⁴ A one-time SO₂ compliance demonstration was performed for the boilers (five boilers, E119, E120, E121, E122, and E126, combined heat input is 113.07 MMBtu/hr) using AP-42 emission factors showing that the limits cannot be exceeded using natural gas. Therefore, there are no monitoring, recordkeeping or reporting requirements for the boiler with respect to SO₂ lb/MMBtu emission limits.

S3. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. CO

See Plantwide Specific Condition.

b. HAP

i. See Plantwide Specific Condition.

ii. For E121 & E122, the owner or operator shall record all hours of operating while combusting liquid fuel, during periods of natural gas curtailment or natural gas supply emergencies.

iii. For E121 & E122, the owner or operator shall monthly calculate and record the monthly and calendar year-to-date total hours of operation when combusting liquid fuel, during the liquid fuel operation testing.

c. NO_x

See Plantwide Specific Condition.

d. Opacity

The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). [40 CFR 60.45c(d)]

e. PM

There are no monitoring or recordkeeping requirements for this pollutant.

f. SO₂

i. For E121 and E122, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to keep records of the amount of fuel combusted during each operating month. [40 CFR 60.48c(g)(1) and 40 CFR 60.48c(g)(2)]

ii. For E121 and E122, the owner or operator shall report records of the amount of each fuel combusted during each operating day for each calendar month during the reporting period. [40 CFR 60.48c(g)(1)]

- iii. For E121 and E122, as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(2)]
- iv. As an alternative to meeting the requirements of §60.48c(g)(1), the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO₂ standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [40 CFR 60.48c(g)(3)]
- v. For E121 & E122, the owner or operator shall demonstrate compliance with the fuel oil sulfur limits (0.5 % by weight) by maintaining records of fuel supplier certification, as described in 1) through 3), for distillate oil. [40 CFR 60.46c(e) and 40 CFR 60.48c(f)(1)]
 - (1) For distillate oil:
 - (a) The name of the oil supplier;
 - (b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and
 - (c) The sulfur content or maximum sulfur content of the oil.
- vi. Records of fuel supplier certification. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period. [40 CFR 60.48c(e)(11)]

S4. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. CO

See Plantwide Specific Condition.

b. HAP

- i. See Plantwide Specific Condition.
- ii. The owner or operator shall report, for E121 & E122, monthly and year-to-date total hours of operation, within the reporting period, when combusting liquid fuel, during the liquid fuel operation testing.

c. NO_x

See Plantwide Specific Condition.

d. Opacity

- i. In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in (c)(1) - (3), as applicable to the visible emissions monitoring method used. [40 CFR 60.48c(c)]
 - (1) For each performance test conducted using Method 9, the owner or operator shall keep the records including the information specified in (c)(1)(i) through (iii). [40 CFR 60.48c(c)(1)]
 - (a) Dates and time intervals of all opacity observation periods; [40 CFR 60.48c(c)(1)(i)]
 - (b) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and [40 CFR 60.48c(c)(1)(ii)]
 - (c) Copies of all visible emission observer opacity field data sheets; [40 CFR 60.48c(c)(1)(iii)]
 - (2) For each performance test conducted using Method 22, the owner or operator shall keep the records including the information specified in (c)(2)(i) - (iv). [40 CFR 60.48c(c)(2)]
 - (a) Dates and time intervals of all visible emissions observation periods; [40 CFR 60.48c(c)(2)(i)]
 - (b) Name and affiliation for each visible emission observer participating in the performance test; [40 CFR 60.48c(c)(2)(ii)]
 - (c) Copies of all visible emission observer opacity field data sheets; and [40 CFR 60.48c(c)(2)(iii)]

- (d) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.
[40 CFR 60.48c(c)(2)(iv)]

e. PM

There are no reporting requirements for this pollutant.

f. SO₂

- i. The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by 40 CFR 60.7. This notification shall include the design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. [40 CFR 60.48c(a) and (a)(1)]
- ii. The owner or operator shall keep records and submit reports to the Administrator, including the following information, as applicable.
[40 CFR 60.48c(d) and (e)]
 - (1) Calendar dates covered in the reporting period.
[40 CFR 60.48c(e)(1)]
 - (2) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under §60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
[40 CFR 60.48c(e)(11)]
- iii. The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
[40 CFR 60.48c(j)]

S5. Testing

[Regulation 2.17, section 5.2]

a. General Requirements

- i. Failure to conduct the required performance test by the required date is a permit violation.

- ii. The owner or operator of an affected facility shall provide the District at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the District the opportunity to have an observer present. [40 CFR 60.8(d)]
- iii. Before conducting a performance test, the owner or operator shall submit a written performance test plan (stack test protocol). The plan shall include the EPA test methods that will be used for testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators that will be monitored during the performance test. The test plans shall be furnished to the District at least 30 days prior to the actual date of the performance test. The Protocol Checklist for a Performance Test is attached to this permit. This checklist provides information that must be provided in the protocol.
- iv. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 days following the actual date of completion of the performance test.

b. Opacity

- i. The owner or operator of an affected facility subject to the opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the District, to determine compliance with the standards using the following procedures and reference methods.
[40 CFR 60.45c(a)]
 - (1) Method 9 shall be used for determining the opacity of stack emissions. [40 CFR 60.45c(a)(8)]
- ii. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) that is not required to use a COMS due to § 60.47c(c) that elects not to use a COMS shall conduct a performance test using Method 9 and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c within 180 days after initial startup of the facility and shall comply with either § 60.47c(a)(1), (a)(2), or (a)(3). The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.¹⁵ [40 CFR 60.47c(a)]

¹⁵ Initial startup means the period of time between the activation of the system and the first firing with fuel oil. The test must be run with fuel oil.

- (1) Except as provided in §60.47c(a)(2) and (a)(3), the owner or operator shall conduct subsequent Method 9 performance tests using the procedures in paragraph (a) according to the applicable schedule in §§60.47c (a)(1)(i) through (a)(1)(iv), as determined by the most recent Method 9 performance test results.
[40 CFR 60.47c(a)(1)]
 - (a) If no visible emissions are observed, a subsequent Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
[40 CFR 60.47c(a)(1)(i)]
 - (b) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; [40 CFR 60.47c(a)(1)(ii)]
 - (c) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or [40 CFR 60.47c(a)(1)(iii)]
 - (d) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.
[40 CFR 60.47c(a)(1)(iv)]
- (2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 performance test, the owner or operator may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using Method 22 according to the procedures specified in §60.47c(a)(2)(i) and (ii).
[40 CFR 60.47c(a)(2)]
 - (a) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e. , 30 seconds per 10 minute period). If the sum of the occurrence of any visible

emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in paragraph (a) within 45 calendar days according to the requirements in §60.45c(a)(8). [40 CFR 60.47c(a)(2)(i)]

- (b) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed. [40 CFR 60.47c(a)(2)(ii)]
- (3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 performance test, the owner or operator may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in §60.47c(a)(2). For reference purposes in preparing the monitoring plan, see OAQPS “Determination of VE Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. EPA; OAQPS; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. [40 CFR 60.47c(a)(3)]
- iii. The owner or operator of each affected facility subject to the opacity limits of §60.43c, shall submit to the District the performance test data from the initial and any subsequent performance tests. [40 CFR 60.48c(b)]

c. SO₂

For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable. [40 CFR 60.44c(h)]

Emission Unit UIA: Insignificant Activities**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
7.08	Standards of Performance for New Process Operations	1, 2, and 3
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	All

Equipment

Emission Point	Description	Install Date	Applicable Regulations¹⁶	Control ID	Release ID
CT-1	Cooling Tower for packaging line #1 (900 gal/minute)	1988	7.08	NA	FCT -1
CT-2	Cooling Tower for packaging line #2 (900 gal/minute)	1988	7.08	NA	FCT -2
CT-3	Cooling Tower for packaging line #3 (900 gal/minute)	1988	7.08	NA	FCT -3
IA TK-W100	Wastewater Receiving Tank	1988	7.25	NA	FTK - W100

Control Devices

There are no control devices associated with this emission unit.

¹⁶ 40 CFR 63 Subpart JJJJJ, National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources emission standards are not applicable by definition to the boilers. §63.11195 lists boilers not subject to the subpart and §63.11195(e) states “A gas fired boiler as defined in this subpart.” §63.11237 defines a gas fired boiler as “Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.”

UIA Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity.¹⁷ [Regulation 7.08, section 3.1.1]

b. PM

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr per piece of equipment based on actual operating hours in a calendar day. [Regulation 7.08, section 3.1.2]

c. VOC

The owner or operator shall not allow or cause the plantwide VOC emissions from all affected facilities (all emission points in U1 and IA TK-100) subject to Regulation 7.25 to equal or exceed 5 tons during any consecutive 12-month period, unless a BACT is submitted and approved by the District.
[Regulation 7.25, sections 2.1 and 3.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. Opacity

There are no monitoring or recordkeeping requirements for this pollutant.

b. PM

There are no monitoring or recordkeeping requirements for this pollutant.

c. VOC

Plantwide VOC emissions (ton) subject to Regulation 7.25 = Hexane/VOC emissions (ton) from Refinery process x (1-0.98) + Hexane/VOC emissions (ton) from Bleaching process + Hexane/VOC emissions (ton) from Hydrogenation process + Hexane/VOC emissions (ton) from Deodorization process + VOC from IA TK-W100.

¹⁷ The District has determined that cooling towers will inherently meet the 20% opacity standard.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. Opacity

There are no monitoring or record keeping requirements for this pollutant.

b. PM

There are no monitoring or record keeping requirements for this pollutant.

c. VOC

The owner or operator shall report the total plantwide consecutive 12-month VOC emissions subject to Regulation 7.25 for each month in the reporting period.

Insignificant Activities

Equipment	Qty.	PTE (ton/yr)	Regulation Basis
Oil/Water Separator for Packaging Line	1	0.015 VOC	Regulation 1.02, section 1.38.1.2
Brazing, soldering, welding	1	0.13 tpy PM	Regulation 1.02, Appendix A, section 3.4
Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants	2	0.01 tpy VOC	Regulation 1.02, Appendix A, section 3.11

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
3. The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
6. The District has determined that no monitoring, recordkeeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.